

CLAIMS:

We claim:

1. (Currently Amended) A hatch for access to an opening in the ground or floor comprising:

a frame;

a lid having an underside and a topside, the lid rotatably attached to the frame ~~so it may be to~~ selectively moved between a closed position and an open position;

a spring support selectively connected to the underside of the lid; and

~~at least one spring connected to the spring support, the spring including a coil portion, a clip arm, and a spring arm, wherein the clip arm is attached to the lid, and the spring arm makes contact with the frame such that the coil portion moves with the lid away from the frame when the lid is in the open position; and~~

wherein the spring biases the lid toward the open position.

2. (Original) The hatch of claim 1 further including at least two rings located on the underside of the lid, wherein the spring support is slideably connected to the lid at the rings.

3. (Original) The hatch of claim 2 wherein there are three rings attached to the underside of the lid and aligned to slideably receive the spring support.

4. (Original) The hatch of claim 1 wherein there is at least one rib attached to the underside of the lid, and having an aperture therein to receive the clip arm.

5. (Original) The hatch of claim 1 wherein a lug extends inwardly from the frame to guide and support the spring arm as the lid moves.

6. (Original) The hatch of claim 1 further including a safety arm that is attached to the hatch, and movable from a storage position to a locking position to prevent the lid from being closed.

7. (Original) The hatch of claim 1 further including a latch connected to the underside of the lid.

8. (Currently Amended) A hatch for access to an opening in the ground or floor comprising:

a frame;

a lid having an underside and a topside, the lid hingedly attached to the frame so it may be to selectively moved between a closed position and an open position;

a spring receptor connected to the underside of the lid; and

at least one spring connected to the spring receptor, the spring including a coil portion, a clip arm, and a spring arm, wherein the clip arm is selectively attached to the lid, and the spring arm makes contact with the frame;

wherein the spring biases the lid towards an open position; and

wherein the coil portion is configured to rotate with the lid as the lid is moved from the closed position to the open position

9. (Original) The hatch of claim 8 wherein the spring is slideably connected to the spring receptor.

10. (Original) The hatch of claim 9 wherein the spring receptor extends from a rib attached to the underside of the lid.

11. (Original) The hatch of claim 10 wherein the rib has an aperture therein to receive the clip arm.

12. (Original) The hatch of claim 8 wherein a lug inwardly extends from the frame to guide and support the spring arm as the lid moves.

13. (Original) The hatch of claim 8 further including a safety arm that is selectively attached to the lid, and movable from a storage position to a locking position to prevent the lid from being closed.

14. (Original) The hatch of claim 8 further including a latch connected to the underside of the lid.

15. (Withdrawn) A spring assembly for a hatch comprised of a lid and a frame, the spring assembly comprising:

a torsion spring having a body with a clip arm and a spring arm extending from opposite ends of the body;

wherein the spring is attached to the lid so that the spring arm only makes sliding contact with the frame as the lid moves from an open to a closed position.

16. (Withdrawn) The spring assembly of claim 15 wherein the spring is slideably attached to a cylinder that is connected to the lid.

17. (Withdrawn) The spring assembly of claim 15 wherein the spring is attached to a spring receptor extending from a rib attached to the lid.

18. (Withdrawn) The spring assembly of claim 15 wherein the spring is attached to a spring receptor extending from a rib attached to the lid.

19. (Withdrawn) The spring assembly of claim 18 wherein the clip arm extends through a rib having an aperture, the rib attached to the lid, and the clip arm selectively fastened so that the spring cannot slide off of the spring receptor.

20. (Withdrawn) The method for assembling a hatch with a frame and a lid, and having a spring assembly to assist in lifting the hatch lid, the method comprising the steps of:

(a) placing the lid in a position so that the lid underside may be accessed;
(b) sliding a torsion spring with a clip arm and a spring arm in engagement with a spring receptor on the lid so that the clip arm is attached to the underside of the lid, and the spring arm is adapted to slidingly contact the hatch frame.

21. (Withdrawn) The method of claim 20 further including the step: (c) selectively locking to the clip arm so that the spring cannot slide off of the spring receptor.

22. (Withdrawn) The method of claim 21, wherein the steps (a)-(c) are performed in the order recited.

23. (Withdrawn) The method for assembling a hatch with a lid and a frame, and having a spring assembly having a cylinder to assist in lifting the hatch lid, the method comprising the steps of:

(a) attaching a clip arm of a torsion spring to the underside of the lid;

(b) sliding the cylinder through the spring body and through rings extending from the underside of the lid so that the spring is connected to the lid;

(c) placing a spring arm extending from the spring body into sliding contact with the frame.

24. (Withdrawn) The method of claim 22, wherein the steps (a)-(c) are performed in the order recited.

25. (Withdrawn) The method of claim 24 further including the step of selectively locking the cylinder to the lid.

26. (New) A hatch providing access to a utility passage comprising:
a frame surrounding the passage;
a lid pivotally engaged with the frame to rotate between a closed position covering the passage and an open position providing access to the passage;
a spring configured to aid in moving the lid from the closed to the open position; and
wherein the biasing spring is configured to rotate with the lid such that the passage is not obstructed by the biasing spring when the lid is in the open position.

27. (New) The hatch of claim 26 further comprising a spring receptor formed in the lid to fixedly engage the spring to draw the spring from the passage as the lid is rotated from the closed position into the open position.

28. (New) The hatch of claim 26 wherein the spring comprises a coil portion, a clip arm, and a spring arm and wherein the clip arm is removeably attached to the lid and the spring arm is slideably engaged with the frame to permit the coil portion to rotate with the lid as the lid is rotated from the closed position into the open position.

29. (New) The hatch of claim 26 further including a safety arm that is selectively attached to one of the lid and the frame and movable from a storage position to a locking position to prevent the lid moving from the open position to the closed position.